

7.4.3 Efficiency Standards for Commercial Air Conditioners and Heat Pumps (1)

| Type | Cooling Capacity (Btu/hr) | Category (2) | Efficiency Level |
|---|---------------------------|--------------|----------------------|
| Small commercial package air conditioning and heating equipment (air-cooled, three-phase) | <65,000 | AC | SEER = 13.0 |
| | | HP | SEER = 13.0 |
| Single package vertical air conditioners and single package vertical heat pumps, single-phase and three phase | <65,000 | AC | EER = 9.0 |
| | | HP | EER = 9.0, COP = 3.0 |
| Single package vertical air conditioners and single package vertical heat pumps | ≥65,000 and <135,000 | AC | EER = 8.9 |
| | | HP | EER = 8.9, COP = 3.0 |
| Single package vertical air conditioners and single package vertical heat pumps | ≥135,000 and <240,000 | AC | EER = 8.6 |
| | | HP | EER = 8.6, COP = 2.9 |
| Small commercial package air-conditioning and heating equipment (air-cooled) | ≥65,000 and <135,000 | AC | EER = 11.2 (3) |
| | | | EER = 11.0 (4) |
| | | HP | EER = 11.0 (3) |
| | | | EER = 10.8 (4) |
| Large commercial package air-conditioning and heating equipment (air-cooled) | ≥135,000 and <240,000 | AC | EER = 11.0 (3) |
| | | | EER = 10.8 (4) |
| | | HP | EER = 10.6 (3) |
| | | | EER = 10.4 (4) |
| Very large commercial package air-conditioning and heating equipment (air-cooled) | ≥240,000 and <760,000 | AC | EER = 10.0 (3) |
| | | | EER = 9.8 (4) |
| | | HP | EER = 9.5 (3) |
| | | | EER = 9.3 (4) |
| Small commercial package air-conditioning heat pump | ≥65,000 and <135,000 | HP | COP = 3.3 |
| Large commercial package air-conditioning heat pump | ≥135,000 and <240,000 | HP | COP = 3.2 |
| Very large commercial package air-conditioning heat pump | ≥240,000 and <760,000 | HP | COP = 3.2 |

Note(s): EER = Energy Efficiency Ratio, COP = Coefficient of Performance. 1) Effective for products manufactured on or after January 1, 2010, except for air-cooled, three-phase small commercial package air-conditioning and heating equipment <65,000 Btu/hr for which standards are effective for products manufactured on or after June 16, 2008. 2) AC = Air Conditioner, HP = Heat Pump. 3) Applies to equipment with electric resistance heating or no heating. 4) Applies to equipment with all other integrated heating-system types.

Source(s): Title 10, Code of Federal Regulations, Part 431 - Energy Efficiency Program for Certain Commercial and Industrial Equipment, Subpart F - Commercial Air Conditioners and Heat Pumps. January 1, 2010.